

Interview Success Rates

Overview

As part of the STD Surveillance Network (SSuN) project, staff at the Virginia Department of Health (VDH) collect enhanced surveillance data for all individuals infected with *Neisseria gonorrhoeae* (i.e. gonorrhea) in the Richmond area. This includes the localities of Richmond City, Chesterfield County, and Henrico County.

Sexually transmitted diseases (STDs) such as gonorrhea are reportable diseases in Virginia. This means that any medical provider or laboratory who diagnoses an individual with gonorrhea is required by law to report that case to VDH for public health surveillance purposes.*

When VDH receives a case report for an individual diagnosed with gonorrhea, staff attempt to contact that patient via phone and conduct a brief phone interview. These interviews include questions about the patient's infection, symptoms, treatment, recent sex partners, risk behaviors, and basic demographics. Up to 10 attempts are made to contact each patient, and interviews must be conducted within 60 days of the gonorrhea diagnosis date.

* Case report data allows the Virginia Department of Health to accurately assess trends in disease distribution, monitor for emerging outbreaks, and plan prevention programs. More information about mandatory disease reporting and full reporting guidelines can be found in Part III of the Commonwealth of Virginia State Board of Health's Regulations for Disease Reporting and Control, available online here: <http://www.vdh.virginia.gov/epidemiology/documents/pdf/regs.pdf>

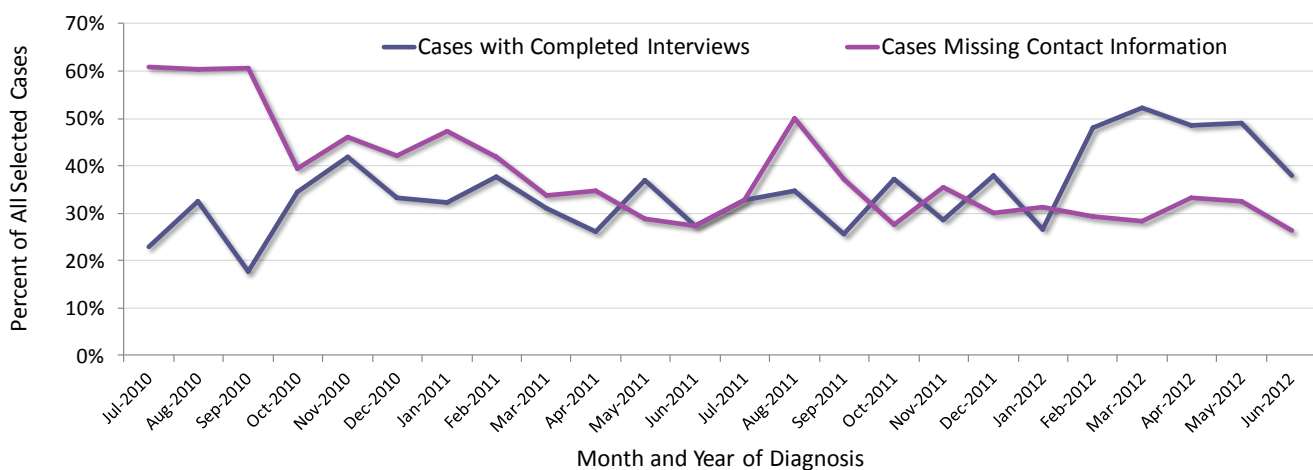
Interview Challenges

Reporting of complete case information by providers is an issue both in Virginia and nationally. All STD case reports submitted to VDH should include the patient's name, address, contact information (i.e. phone number), age, date of birth, sex, race/ethnicity, diagnosis date, and treatment information. However, reporting of race, phone number, and treatment information is often not complete or timely.

For example, 20% of all gonorrhea cases diagnosed in Virginia in 2011 were missing information on race/ethnicity. This proportion is lower among SSuN cases because of enhanced surveillance activities (only 8% were missing race/ethnicity in 2011), but incomplete or inaccurate reporting of patient phone numbers remains a barrier to conducting interviews.

Among gonorrhea cases diagnosed in 2011 in the Richmond area, 33% percent were successfully interviewed. That is, through SSuN activities, VDH has enhanced surveillance data for one-third of all cases diagnosed. However, an additional 35% of cases were missing any contact information or had incomplete/inaccurate contact information. While SSuN interview success rates have steadily improved over the past two years (see Figure 1), incomplete case reporting continues to hinder STD surveillance efforts.

Figure 1. SSuN Population Surveillance Interview Success Rates, July 2010 – June 2012



SSuN Special Focus: Interview Success Rates

Interview Success Rates by Provider Type

In the Richmond area, gonorrhea case reporting completeness varies significantly by provider type (Table 1). Reporting tends to be better from larger facilities such as hospital emergency departments and urgent care centers. Only 31% of cases diagnosed in such facilities were missing contact information between July 2010 and June 2012, yielding an interview success rate of 42% (Figure 2).

In contrast, 67% of gonorrhea cases reported to VDH from private providers during the same time period were missing information on patient phone numbers, resulting in an interview success rate of only 19%. Similarly, half of all reports from OB/GYN or family planning clinics were missing contact information.

Interview Rates by Patient Demographics

Interview success rates varied by patient characteristics, such as gender, race/ethnicity, and age (Table 2). From July 2010 through June 2012, 38% of female cases were successfully interviewed, compared to 33% of male cases.

Interview success rates were highest for cases of Hispanic ethnicity (63%), but comparable for cases among blacks and whites (38% and 36% respectively). There was also little variation in success rates by patient age.

What is SSuN? A Quick Overview

The STD Surveillance Network (SSuN) is an enhanced surveillance project sponsored by the Centers for Disease Control and Prevention (CDC). The purpose of SSuN is to fill critical gaps in national surveillance and improve the capacity of national, state, and local sexually transmitted disease (STD) programs.

SSuN has two main components: STD clinic surveillance and *Neisseria gonorrhoeae* (NG) population surveillance. The former involves collecting enhanced information on patients presenting to STD clinics, while the latter involves interviewing patients diagnosed with gonorrhea in the general population. The data captured as part of SSuN include information not only on STD diagnoses, but also on patient demographics, disease symptoms, treatment, and high-risk behaviors.

Twelve sites across the United States now participate in these enhanced surveillance activities, including 42 STD clinics in 115 counties. Nationally, SSuN now captures information on approximately 20% of all gonorrhea cases diagnosed annually.

In Virginia, three localities participate in the SSuN project: Richmond City, Chesterfield County, and Henrico County. Enhanced surveillance data is captured for approximately 6,000 STD clinic visits and over 1,000 cases of gonorrhea each year in Virginia.

Overall, 2.8% of cases refused to complete the interview. There were no differences in the proportion of cases who refused to participate in the SSuN interview by racial/ethnic category. However, older patients were more likely to refuse, with 6.4% of those aged over 35 years declining to participate.

Table 1. SSuN Population Surveillance Interview Success Rates by Provider Type, July 2010 - June 2012

Provider Type	All Cases Eligible for Interview	Successfully Interviewed Cases		Cases with Missing or Insufficient Contact Information		Cases who Refused Interview	
	Total	Total	%	Total	%	Total	%
Emergency Room / Urgent Care	743	314	42.3%	233	31.4%	25	3.4%
OB/GYN, Family Planning	504	157	31.2%	253	50.2%	14	2.8%
STD Clinic	420	156	37.1%	104	24.8%	14	3.3%
Private Provider / HMO	152	29	19.1%	102	67.1%	0	0.0%
Hospital (Other)	54	30	55.6%	14	25.9%	1	1.9%
Community / Public Clinic	50	7	14.0%	28	56.0%	1	2.0%
School	31	13	41.9%	16	51.6%	0	0.0%
Jail/Prison	24	1	4.2%	20	83.3%	0	0.0%
Other [†]	8	2	25.0%	2	25.0%	0	0.0%
Unknown/Missing	3	1	33.3%	1	33.3%	0	0.0%
Total	1,989	710	35.7%	773	38.9%	55	2.8%

* Date range based on case diagnosis date

[†] Includes HIV care clinics, outreach programs, military, and other facilities

SSuN Special Focus: Interview Success Rates

Figure 2. Interview Success Rates by Provider Type, July 2010 - June 2012

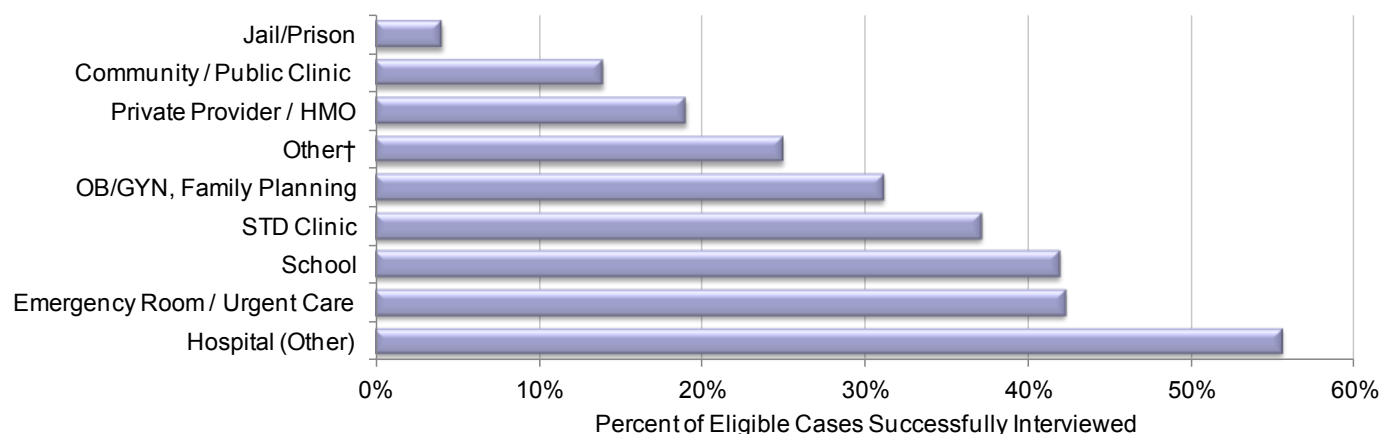


Table 2. Interview Success Rates by Patient Demographics, July 2010 - June 2012

Patient Demographics	All Cases Selected for Interview	Successfully Interviewed Cases		Cases with Missing or Insufficient Contact Information		Cases who Refused Interview	
	Total	Total	%	Total	%	Total	%
Gender†							
Male	871	285	32.7%	321	36.9%	26	3.0%
Female	1,115	424	38.0%	450	40.4%	29	2.6%
Race/Ethnicity							
Black, non-Hispanic	1,644	629	38.3%	566	34.4%	50	3.0%
White, non-Hispanic	124	45	36.3%	46	37.1%	4	3.2%
Hispanic	38	24	63.2%	6	15.8%	0	0.0%
Other, non-Hispanic	19	10	52.6%	6	31.6%	1	5.3%
Unknown	164	2	1.2%	149	90.9%	0	0.0%
Age‡							
15-19 years	508	181	35.6%	218	42.9%	10	2.0%
20-24 years	804	290	36.1%	309	38.4%	20	2.5%
25-29 years	328	121	36.9%	116	35.4%	12	3.7%
30-34 years	145	54	37.2%	59	40.7%	1	0.7%
35+ years	188	62	33.0%	64	34.0%	12	6.4%
Total	1,989	710	35.7%	773	38.9%	55	2.8%

* Date range based on case diagnosis date † Transgender (n = 1) and patients with unknown gender (n = 2) not shown

‡ Patients aged 10-14 years (n = 2) and those missing age information are not shown (n = 6)

Summary

*35% of all gonorrhea cases reported in 2011 in the Richmond area were missing patient contact information

*This poses problems for conducting SSuN phone interviews with patients diagnosed with gonorrhea

*Complete reporting is more common for cases diagnosed in ERs or urgent care clinics

*33% of cases were interviewed successfully in 2011

*An average of 30 phone interviews were conducted each month

*SSuN interview success rates have improved over time